



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/688,383	10/17/2003	Ie-Hong Lin	020292	2247

23696 7590 12/17/2008  
QUALCOMM INCORPORATED  
5775 MOREHOUSE DR.  
SAN DIEGO, CA 92121

EXAMINER
----------

MILLER, BRANDON J

ART UNIT	PAPER NUMBER
----------	--------------

2617

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

12/17/2008

ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

us-docketing@qualcomm.com  
kascanla@qualcomm.com  
nanm@qualcomm.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/688,383	<b>Applicant(s)</b> LIN, IE-HONG	
	<b>Examiner</b> BRANDON J. MILLER	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2008.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-27 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-26 is/are allowed.
- 6) ☒ Claim(s) 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 October 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

**DETAILED ACTION**

***Response to Amendment/Remarks***

***Disposition of Claims***

- I. Claims 1-27 remain pending in the application.

***Allowable Subject Matter***

- II. The following is a statement of reasons for the indication of allowable subject matter:

Claim 1 recites a method for identifying transmitters in a wireless communication system with steps as defined in the specification (pages 5-26) including obtaining a plurality of received signals for a plurality of transmitters, wherein the plurality of received signals are received by a user terminal; and determining a transmitter for each received signal by determining a measured power for the received signal, determining a list of a plurality of candidate transmitters for the received signal, obtaining predicted power for each candidate transmitter in the list, and identifying the transmitter for the received signal based on predicted powers for the candidate transmitters and measured power for the received signal.

Applicant's independent claim 1 recites a particular combination of steps for identifying transmitters in a wireless communication system, which is neither taught nor suggested by the prior art.

Dependent claims 2-12 are allowable based on their dependence of independent claim 1.

Art Unit: 2617

Claim 13 recites a method for determining transmitters in a wireless communication system with steps as defined in the specification (pages 5-26) including obtaining a plurality of received signals for a plurality of transmitters, wherein the plurality of received signals are received by a user terminal; determining measured power for each of the plurality of received signals; and determining a transmitter for each received signal by determining a list of candidate transmitters for the received signal, determining an identified transmitter, determining measured power of the identified transmitter, obtaining predicted power for each candidate transmitter in the list, obtaining predicted power for the identified transmitter, determining the transmitter for the received signal based on predicted powers for the candidate transmitters, the predicted power for the identified transmitter, measured power of the received signal, and measured power for the identified, transmitter.

Applicant's independent claim 13 recites a particular combination of steps for determining transmitters in a wireless communication system, which is neither taught nor suggested by the prior art.

Dependent claims 14-18 are allowable based on their dependence of independent claim 13.

Claim 19 recites an apparatus for determining transmitters in a wireless communication system with a structure as defined in the specification (pages 5-26) including means for obtaining a plurality of received signals for a plurality of transmitters, wherein the plurality of received signals are received by a user terminal; means for determining a plurality of lists of candidate transmitters for the plurality of received signals, one candidate list for each received signal;

Art Unit: 2617

means for obtaining predicted power for each candidate transmitter; means for determining a measured power for each of the plurality of received signals; and means for identifying the transmitter for each received signal based on measured power for the received signal and predicted powers for the candidate transmitters in the list determined for the received signal.

Applicant's independent claim 19 recites a particular combination of elements for identifying transmitters in a wireless communication system, which is neither taught nor suggested by the prior art.

Dependent claims 20-26 are allowable based on their dependence of independent claim 13.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

III. Claim 27 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Claim 27 recites "a computer-readable medium encoded with software code" in lines 1-2. This subject matter is not described or suggested in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the

Art Unit: 2617

application was filed, had possession of the claimed invention. The specification, in paragraph [1107] of page 25, recites software code that may be stored in a memory unit. This suggests software code storable in a memory. However, this does not teach or suggest the a computer-readable medium encoded with software code.

The limitations first appear in claim 27 of this amendment dated 08/15/2008. However, because the amendment adding this limitation is over four years after the 10/17/2003 filing date of the application and the limitation is not recited or suggested anywhere else in the application as filed, the amendment constitutes new matter.

### ***Response to Arguments***

IV. Applicant's arguments with respect to claim 27 have been considered but are moot in view of the new ground(s) of rejection.

V. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

Art Unit: 2617

however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

***Conclusion***

VI. Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRANDON J. MILLER whose telephone number is (571)272-7869. The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/George Eng/  
Supervisory Patent Examiner, Art Unit 2617

December 09, 2008

/Brandon J Miller/  
Examiner, Art Unit 2617

Application/Control Number: 10/688,383

Page 7

Art Unit: 2617